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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,906	06/22/2001	Dominik J. Schmidt		7458

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EXAMINER	
GELIN, JEAN ALLAND	
ART UNIT	**PAPER NUMBER**
2681	4

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/887,906	SCHMIDT, DOMINIK J.	
	Examiner	**Art Unit**	
	Jean A Gelin	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Dunn et al. (US 5,625,877).

Regarding to claim 1, Dunn teaches a method to wirelessly communicate data over a plurality of cellular channels (i.e., sending large amount of information over aggregating available radio channels, col. 6, lines 1-62), comprising: requesting an allocation of preferably adjacent cellular frequency channels from a mobile station to a base station (i.e., portable terminal demands the master microprocessor for available radio channels, col. 7, lines 5-37, col. 8, lines 23-44); allocating available frequency channels in response to the request from the mobile station (allocating channels, col. 8, lines 34-44); and bonding the available frequency channels to communicate data (corresponding to aggregation of available channels is accomplished, communication between the portable terminal and the master, col. 8, lines 1-67).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosener et al. (US 2002/0028655).

Regarding to claim 11, Rosener teaches a reconfigurable processor core, comprising: one or more processing units (T28 GSM phone which can assume the identity of phone 101 typically include a processor (section 0060); a long-range transceiver unit coupled to the processing units, the long-range transceiver unit communicating over a plurality of cellular frequency channels (RF interface to communicate with base stations outside of the car, section 0060); a short-range transceiver coupled to the processing units (bluetooth interface to communicate inside the car, section 0060); and means for bonding a plurality of channels (i.e., when inside a combination of bluetooth and the RF interface allows the user to communicate, section 0060, 0118-0119).

Regarding to claim 12, Rosener teaches wherein the reconfigurable processor core includes one or more digital signal processors (DSPs) (section 0089, 0091, claim 17).

Regarding to claim 13, Rosener teaches wherein the reconfigurable processor core includes one or more reduced instruction set computer (RISC) processors (claim 17 and fig. 9).

Regarding to claim 14, Rosener teaches comprising a router coupled to the one or more processing units (to switch from direct RF interface to the use bluetooth interface (section 0118-0119).

Regarding to claim 15, Rosener teaches wherein the short-range transceiver communicates over a short-range radio channel, further comprising means for bonding the short-range radio channel with the cellular frequency channels to increase bandwidth (sections 0060, 0118-0119).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. in view of Arazi et al. (US 6,430,395).

Regarding claim 2, Dunn teaches aggregating radio channels. But Dunn fails to teach communicating on a short-range radio channel.

However, communication on a short-range radio channel is known in the art of communications. Arazi teaches a cellular handset communicating with a base station via a short range communication link (col. 16, lines 50-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to implement the techniques short-range radio channel taught by Arazi within the system

of Dunn in order to allow the laptop computer and the subscriber remote unit illustrated in fig. 1 of Dunn to communicate wirelessly; thus, the short-range radio channel replaces the cable connection.

Regarding claim 3, Dunn in view of Arazi teaches all the limitations. Arazi teaches wherein the short-range radio channel is Bluetooth (col. 16, lines 50-55).

Regarding claim 4, Dunn in view of Arazi teaches all the limitations. Arazi teaches a cellular handset with bluetooth technology (i.e., inherently a long range and a short range radio channel). Dunn teaches (short-range radio channel with the cellular frequency channels to increase bandwidth) aggregating radio channels to increase bandwidth (col. 10, lines 20-42). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the system of Dunn Arazi in order to aggregate the radio channels and allow the user of the laptop computer to receive data over the wireless link (cellular and bluetooth links).

7. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. in view of Park (US 6,081,168).

Regarding to claim 5, Dunn teaches all the limitations above except wherein the cellular channels comprise an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz.

However, the preceding limitation is known in the art of communications. Park teaches GSM has separate transmission and reception frequencies wherein an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz (col. 1, lines 18-24). Therefore, it would have been obvious to one of ordinary skill in the art, at the

time the invention was made, to implement the techniques of Park within the system of Dunn in order to use a channel path for transmission and another channel path for reception; thus, reducing collision and interference over the communication channel.

Regarding claim 6, Dunn in view of Park teaches all the limitations above. Dunn further teaches bonding over two adjacent channels (i.e., portable terminal demands the master microprocessor for available radio channels, col. 7, lines 5-37, col. 8, lines 23-44).

Regarding claim 7, Dunn in view of Park teaches all the limitations above. Park further teaches wherein each band is divided into 124 pairs of frequency duplex channels with 200 kHz carrier spacing using Frequency Division Multiple Access (FDMA) (col. 1, lines 30-57).

Regarding claim 8, Dunn in view of Park teaches all the limitations above. Park further teaches splitting the 200 kHz radio channel into a plurality of time slots (col. 1, lines 33-52); bonding the time slots, and transmitting and receiving data in the bonded time slots (col. 1, lines 33-52).

Regarding claim 9, Dunn in view of Park teaches all the limitations above. Park further teaches the 200kHz radio channel using time division multiple access (TDMA) (col. 1, lines 33-53).

Regarding claim 10, Dunn in view of Park teaches all the limitations above. Dunn further teaches comprising transmitting cellular packet data conforming to one of the following protocols: cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136) (inherently present in col. 10, lines 20-55).

8. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosener et al. in view of Park (US 6,081,168).

Regarding to claim 16, Rosener teaches all the limitations above except wherein the cellular channels comprise an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz.

However, the preceding limitation is known in the art of communications. Rosener teaches GSM has separate transmission and reception frequencies wherein an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz (col. 1, lines 18-24). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to implement the techniques of Park within the system of Dunn in order to use a channel path for transmission and another channel path for reception; thus, reducing collision and interference over the communication channel.

Regarding claim 17, Rosener et al. in view of Park teaches all the limitations above. Rosener further teaches bonding over two adjacent channels (section 0126).

Regarding claim 18, Rosener et al. in view of Park teaches all the limitations above. Park further teaches splitting the 200 kHz radio channel into a plurality of time slots (col. 1, lines 33-52); bonding the time slots, and transmitting and receiving data in the bonded time slots (col. 1, lines 33-52).

Regarding claim 19, Rosener et al. in view of Park teaches all the limitations above. Park further teaches the 200kHz radio channel using time division multiple access (TDMA) (col. 1, lines 33-53).

Regarding claim 20, Rosener et al. in view of Park teaches all the limitations above. Rosener further teaches comprising transmitting cellular packet data conforming to one of the following protocols: cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136) (inherently present in sections 0084 and 0105).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Einola (US 5,960,354) teaches frequency range of uplink direction 890-915 MHZ and frequency range of downlink direction 935-960 MHZ.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (703) 305-4847. The examiner can normally be reached on 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4847.

JEAN GELIN
PATENT EXAMINER

JGelin
January 28, 2004 Jean Alland Gelin